

538,992

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 July 2004 (22.07.2004)

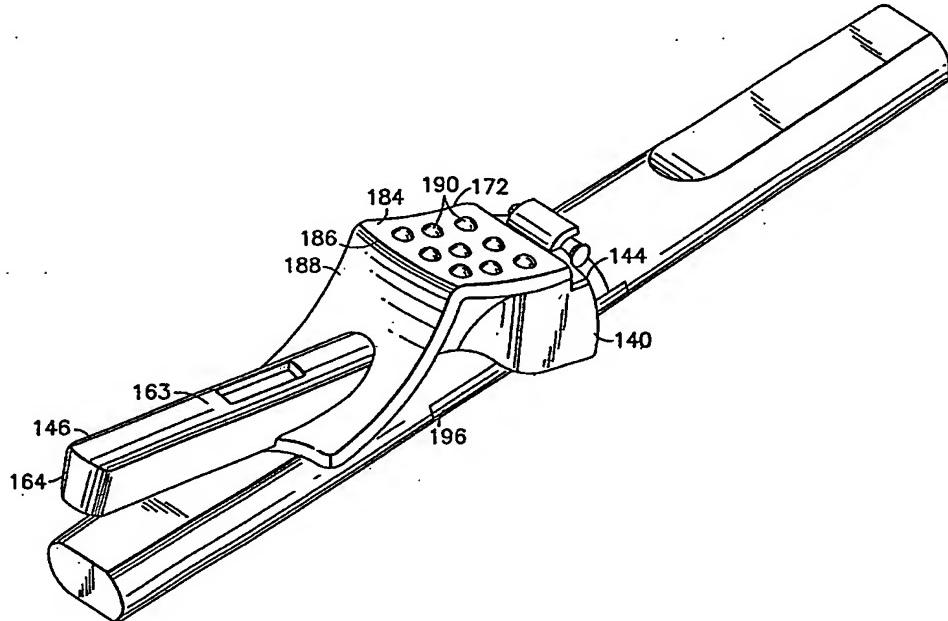
PCT

(10) International Publication Number
WO 2004/060161 A2

- (51) International Patent Classification⁷: **A61B 5/15,** (A61M 5/32)
- (21) International Application Number: **PCT/US2003/039791**
- (22) International Filing Date: 15 December 2003 (15.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/433,760 16 December 2002 (16.12.2002) US
- (71) Applicant: **BECTON DICKINSON AND COMPANY** [US/US]; 1 Becton Drive, Franklin Lakes, NJ 07417-1880 (US).
- (71) Applicants and Inventors: CRAWFORD, Jamieson, W., M. [US/US]; 250 West 105th Street-Apt.#3G, New York, NY 10025 (US). BENNETT, Michael [US/US]; 216 Mountain Avenue, Summit, NJ 07901 (US). NEWBY, C, Mark [US/US]; 186 Maplebrook Road, Tuxedo, NY 19087 (US).
- (74) Agent: HESPOS, Gerald, E.; Casella & Hespos LLP, Suite 1703, 274 Madison Avenue, New York, NY 10016 (US).
- (81) Designated States (*national*): AU, BR, CN, IN, JP, US.
- (84) Designated States (*regional*): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).
- Published:
— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: SAFETY NEEDLE ASSEMBLY



WO 2004/060161 A2

(57) Abstract: A safety needle assembly includes a hub with a needle cannula that has a pointed distal end that projects distally beyond the hub. A shield is hinged to the hub for rotation from a first position where the needle cannula is exposed to a second position where the needle cannula is shielded. The cannula finger lock has a base end joined integrally to a sidewall of the shield and a free end that projects angularly from the sidewall towards the top wall. Portions of the cannula finger lock near the base end are relatively rigid, whereas portions of the cannula finger lock towards the free end are more flexible.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.